

Claims

1. A board fixing device wherein, when a printed circuit board is inserted into a connector fixed to a motherboard wherfrom a printed circuit board is detachable, said connector having spring contacts forming a contact point row in a direction perpendicular to the insertion direction of a board, said printed circuit board is rotated in a direction whereby the said spring contacts are pressed, while one end of said printed circuit board is put into contact with the spring contacts, and the other end of the said printed circuit board is locked against the driving force of said spring contacts, thereby fixing the printed circuit board; comprising

a base portion extending along an edge portion of the said other end of the printed circuit board;

protruding portions provided in the vicinity of both ends of the base portion, preventing said printed circuit board from being lifted up when the printed circuit board is fixed, by covering the vicinity of both end portions of an edge portion of the printed circuit board;

and a stabilizing piece being formed in a perpendicular direction from said base portion, and fitting into a notched portion formed in the edge portion of the said other end of the printed circuit board when the printed circuit board is fixed.

2. A board fixing device wherein, when a printed circuit board is inserted into a connector fixed to a motherboard wherfrom a printed circuit board is detachable, said connector having spring contacts forming a contact point row in a direction perpendicular to the insertion direction of a board, said printed circuit board is rotated in a direction whereby the said spring contacts are pressed, while one end of said printed circuit board is put into contact with the spring contacts, and the other end of the said printed circuit board is locked against the driving force of said spring contacts, thereby fixing the printed circuit board; comprising

a base portion extending along an edge portion of the said other end of the printed circuit board;

protruding portions provided in the vicinity of both ends of the base portion, preventing said printed circuit board from being lifted up when the printed circuit board is fixed, by covering the vicinity of both end portions of an edge portion of the printed circuit board;

and a stabilizing piece protruding from a mounting piece joined to a base portion whereupon the said printed circuit board is placed, that is inserted into a hole provided on the printed circuit board when the printed circuit board is fixed, thereby fixing said printed circuit board in the board surface direction.

3. A board fixing device wherein, when a printed circuit board is inserted into a connector fixed to a motherboard wherfrom a printed circuit board is detachable, said connector having spring contacts forming a contact point row in a direction perpendicular to the insertion direction of a board, said printed circuit board is rotated in a direction whereby the said spring contacts are pressed, while one end of said printed circuit board is put into contact with the spring contacts, and the other end of the said printed circuit board is locked against the driving force of said spring contacts, thereby fixing the printed circuit board; comprising

a base portion extending along an edge portion of the said other end of the printed circuit board;

protruding portions provided in the vicinity of both ends of the base portion, preventing said printed circuit board from being lifted up when the printed circuit board is fixed, by covering the vicinity of both end portions of an edge portion of the printed circuit board;

a back portion joined to the said base portion and extending along the back surface of the base portion;

and a stabilizing piece protruding from the portion joined to the said back portion, that is inserted into a hole provided on a printed circuit board when the said printed circuit board is fixed, thereby fixing said printed circuit board in the board surface direction.

4. A board fixing device recited in Claim 3, characterized in that during the fixing of a printed circuit board, the said back portion restricts the said base portion from being elastically

deformed beyond a predetermined amount, when the said base portion is elastically deformed due to contact between the said other end of the printed circuit board and the inclined surface of the top portion of a protruding portion provided on the base portion.

5. A board fixing device recited in any of Claims 1 through 4, characterized in that the top portion of a protruding portion of the said base portion has an inclined surface inclined towards the motherboard side, and when the said other end is pressed towards the motherboard direction in order to fix a printed circuit board, the said base portion elastically deforms due to a force exerted on the said inclined surface, and when the said other end goes beyond the protruding portion, the said base portion returns to its original position due to resilience, thereby making both end portions of a printed circuit board and the said protruding portions lockable.
6. A board fixing device recited in Claim 1, having a grounding terminal portion coming into contact in the vicinity of a side portion of the said other end of a printed circuit board.
7. A board fixing device recited in Claim 6, wherein the said grounding terminal is formed integrally from a conducting material, along with the motherboard-fixing portion.
8. A board fixing device recited in any of Claims 1 through 7, comprising a wall that restricts the deformation of a base portion beyond a predetermined amount, when the said base portion elastically deforms due to contact between the said other end of a printed circuit board and the said inclined surface of the top portion of a protruding portion provided on the base portion, during the fixing of a printed circuit board.